

Q₁ [page 4, lines 1-21] The efficiency of catalyst stripping is increased by using vertically spaced baffles to cascade the catalyst from side to side as it moves down a stripping apparatus and counter-currently contacts a stripping medium. Moving the catalyst horizontally increases contact between the catalyst and the stripping medium so that more hydrocarbons are removed from the catalyst. In these arrangements, the catalyst is given a labyrinthine path through a series of baffles located at different levels. Catalyst and gas contact is increased by this arrangement that leaves no open vertical path of significant cross-section through the stripping apparatus. Further examples of these stripping devices for FCC units are shown in US-A-2440620, US-A-2612438, US-A-3894932, US-A-4414100 and US-A-4364905. These references show the typical stripper arrangement having a stripper vessel, a series of outer baffles in the form of frusto-conical sections that direct the catalyst inwardly onto a series of inner baffles. The inner baffles are centrally located conical or frusto-conical sections that divert the catalyst outwardly onto the outer baffles. The stripping medium enters from below the lower baffles and continues rising upwardly from the bottom of one baffle to the bottom of the next succeeding baffle. Variations in the baffles include the addition of skirts about the trailing edge of the baffle as depicted in US-A-2994659 and the use of multiple linear baffle sections at different baffle levels as demonstrated in FIG. 3 of US-A-4500423. A variation in introducing the stripping medium is shown in US-A-2541801 where a quantity of fluidizing gas is admitted at a number of discrete locations.

Q₂ [paragraph bridging pages 5 and 6] However, better stripping brings more important economic benefits to the FCC process by reducing coke production. Reducing coke production permits a lowering of the regenerator temperature so that the reaction may operate at a higher catalyst-to-oil (C/O) ratio. The higher C/O increases conversion and increases the production of valuable products. A stripping operation that reduces the production of coke by 0.05 wt-% can lower regenerator temperature by 15° to 20°F (−9° to −7°C) and permit a C/O ratio

62 increase in the range of 6%. The corresponding improvement in conversion yields 0.6 to 0.7 vol-% more gasoline as well also increasing the yield of desired light products. Therefore, it is a further objective of this invention to decrease coke production by more efficient catalyst stripping.

63 [page 14, lines 2-3] FIG. 1 is representative of the prior art and shows a schematic, sectional elevation view of a stacked FCC regenerator-reactor and stripper arrangement.

IN THE DRAWINGS

Please accept formal drawings for purposes of examination of the subject application. In the formal drawings, the hole distribution in FIG. 7 has been corrected to be consistent with the way it is described at page 28, lines 7-11 of the specification.

REMARKS

Applicant respectfully requests the amendments to the specification to correct obvious errors in the application. These errors were inadvertent and went unnoticed until this point. These amendments are formal in nature and are not believed to add new matter or to require substantial work on the part of the Office. Accordingly, entry of these amendments is respectfully requested.

Applicant also respectfully submits formal drawings for examination purposes in the subject application. Applicant has submitted FIG. 7 which has a corrected hole distribution to make it consistent with the description of the hole distribution in the specification at page 28, lines 7-11, which states that "the hole distribution biases the distribution of the holes toward the lower end of the sloped baffle surface," and that "in the uppermost rings of openings ... the spacing between the holes is at a maximum." No new matter is added because the appropriate hole distribution is described in the specification. Applicant has included one (1) copy of the formal drawings and three (3) copies of FIG. 7